REMARKS

Claims 1, 4-28, 31 and 32 are pending in the present application. As will be discussed below, Claim 1 has been amended and new Claim 32 has been added. No new matter has been added. Accordingly, entry of the present Amendment is requested.

Applicants respectfully submit that entry of the present Amendment is appropriate, despite the finality of the Office Action dated September 23, 2002, because it is believed the present Amendment places the application in condition for allowance.

Claims 1, 4-6 and 11-28 have again been rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 4,517,163 to Jodden *et al.* Additionally, Claims 1, 4-8, 11-28 and 31 have also been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,465,656 to Pastor *et al.*

Applicants respectfully traverse these rejections for the following reasons.

In connection with the rejection based upon Jodden, it is asserted that "since Jodden teaches the instantly claimed process the instantly claimed product would also necessarily be formed."

However, as Applicants previously emphasized, Jodden teaches that the particle size of the raw material containing titanium oxide is preferably from 20 to 1000 μm and the particle size of the comminuted product is preferably from 60 to 600 μm. *See*, column 1, lines 48-58.

In contrast, in the present invention, the metal oxide powder used as a raw material preferably has an average particle size of 0.1 μm or less. *See*, for example, page 8 of the specification, lines 7-8. Accordingly, Applicants respectfully submit that it is not appropriate to conclude that the metal oxide powder produced by the process of Jodden would have the same

particle size as that claimed in the present application, on the basis that the process of Jodden is assertedly similar to the process of the present invention.

In order to further distinguish the present claimed invention from the cited references, Applicants have amended Claim 1 to recite a number average particle size of 40 μm or less. Support for the present amendment is provided by Table 3 of the specification (*see*, Example 21).

Additionally, as Applicants also previously emphasized, Pastor discloses a process for the preparation of a water-free oxide of silicon or germanium. Pastor reacts a nonpolar chloride compound containing the silicon or germanium with dimethyl sulfoxide to form a precipitate containing the oxide. Applicants respectfully submit that this process is entirely different from the process of the present invention.

It is asserted that "the examples [of Pastor] expressly teach the instantly claimed process of calcining, *i.e.*, heating at 1000°C, a non alpha alumina powder, *et.* silica, germanium doxide, lanthanum oxide, *etc.* in molecular halogen, *e.g.*, chlorine, which would produce the instantly claimed product." However, Applicants respectfully submit that the examples of Pastor do not describe titanium oxide, zirconium oxide or their precursors.

Further, Pastor does not teach, suggest or appreciate the advantages of D_{10}, D_{90} and a D_{90}/D_{10} ratio and a ratio of an agglomerated particle size to a primary particle size. Accordingly Applicants respectfully submit that the present invention would not have been obvious from Pastor.

In addition, Applicants have added new Claim 32 which recites a method for producing a calcined metal oxide powder having a narrow particle size distribution (except alpha alumina).

The method includes the steps of calcining a metal oxide powder or a metal oxide precursor powder in the presence or absence of a seed crystal in an atmosphere which is either hydrogen halide or a component prepared from molecular halogen and steam. Applicants respectfully submit that such a method is not taught or suggested by the cited references.

In view of the foregoing, Applicants respectfully submit that the present claimed invention would not have been *prima facie* obvious from the cited references. Accordingly, withdrawal of the rejections is requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Date: March 24, 2003

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1. (Twice Amended) A metal oxide powder except α-alumina, comprising polyhedral particles having at least 6 planes each, a number average particle size of ~~from 0.1 to 300 μm,~~ 40 μm or less and a D_{90}/D_{10} ratio of 5 or less where D_{10} and D_{90} are particle sizes at 10% and 90% accumulation, respectively from the smallest particle size side in a cumulative particle size curve of the particles, and

wherein a ratio of agglomerated particle size to a primary particle size is from 1 to 6.

Claim 32 is added as a new claim.